INSTRUCTIONS FOR INSTALLATION, USE AND MAINTENANCE

RAIS PILAR 13 L & PILAR 13 H

IMPORTANT INFORMATION

On first lighting the stove you must be careful not to touch the painted surfaces and it is MOST IMPORTANT that the door is kept slightly 'ajar' in order for the door seal and sealant to cure.
This will prevent the door seal sticking to the painted body and becoming damaged.

CLEAN AIR ACT
APPROVED FOR WOOD

NORDISK MILJØMÆRKNING
541 005

FIRE ENVIRONMENTALLY FRIENDLY!

3 Eco-friendly advices for sensible heating
- common sense both environmentally and economically.

1. Effective lighting. Use brushwood, kindling and possibly a piece of newspaper.
2. Light the fire with only little wood at a time - this gives the best combustion.
3. Use only dry wood - i.e. wood with a moisture content of 15 to 22 percent.

The oven is wrapped in packaging that is recyclable. This must be disposed of according to national rules regarding the disposal of waste.

The glass can not be reused.
The glass should be discarded along with the residual waste from ceramics and porcelain.
Pyrex glass has a higher melting temperature and therefore can not be reused.
If discarded you make an important positive contribution to the environment.

We cannot be held responsible for any misprints.

Date : 2014 March
Rev : 3

HETAS SUPPLEMENT 4
INTRODUCTION 10
WARRANTY 11
SPECIFICATIONS 12
INSTALLATION INSTRUCTIONS 13
CONVETION 14
CHIMNEY 14
INSTALLATION 15
INSTALLATION OF STOVE WITH SWIVEL BASE 16
SWIVEL BASE FOR 66° TURNING 17
SWIVEL BASE FOR 360° TURNING 18
INSTALLATION DISTANCE 19
INSTALLATION DISTANCE FOR COMBUSTIBLE WALL 20
INSTALLATION DISTANCE FOR CORNER SETTING 45° 21
INSTALLATION DISTANCE FOR NON COMBUSTIBLE WALL 22
360° SWIVEL BASE 23
FOR THE INSTALLER 24
FUEL 24
DRYING AND STORAGE 25
ROOM VENTILATION AND STOVES 25
AUTOMATIC REGULATION OF COMBUSTION AIR 25
FIRST USAGE 26
CLEANING AND CARE 31
CLEANING THE COMBUSTION CHAMBER 32
CLEANING OF THE FLUE WAYS 32
PROBLEM SOLVING (INTERRUPTION OF OPERATION) 33
SPARE PARTS 34
ACCESSORIES 36
PROBLEM SOLVING 37
DIMENSIONS 38
DECLARATION OF PERFORMANCE 39

We cannot be held responsible for any misprints.

SUPPLEMENTARY INSTALLATION INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE INSTRUCTION BOOKLET

READ THE INSTRUCTION BOOKLET AND THESE SUPPLEMENTARY INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

These instructions together with those in the instruction booklet cover the basic principles to ensure the satisfactory installation of the stove, although detail may need slight modification to suit particular local site conditions.
In all cases the installation must comply with current Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove.
It should be noted that the Building Regulations requirements may be met by adopting the relevant recommendations given in British Standards BS 8303, BS EN 15287-1:2007 as an alternative means to achieve an equivalent level of performance to that obtained following the guidance given in Approved Document J.

Please note that it is a legal requirement under England and Wales Building Regulations that the installation of the stove is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

CO Alarms:-
Building regulations require that when ever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions. Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

HEALTH AND SAFETY PRECAUTIONS

Special care must be taken when installing the stove such that the requirements of the Health and Safety at Work Act are met.

Handling
Adequate facilities must be available for loading, unloading and site handling.

Fire Cement
Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

Asbestos
This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

Metal Parts
When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

STOVE PERFORMANCE

In the UK the stove has been approved by HETAS Ltd as an intermittent operating appliance for burning wood logs only.

PREPARATORY WORK AND SAFETY CHECKS

IMPORTANT WARNING

This stove must not be installed into a chimney that serves any other heating appliance.
There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit fumes into the room.

Chimney

For the stove to perform satisfactorily the chimney height must be sufficient to ensure an adequate draught of approximately 15 Pa so as to clear the products of combustion and prevent smoke problems into the room.

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in EN 13384-1 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

If installation is into an existing chimney then it must be sound and have no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large i.e. more than 230 mm x 230 mm. Remedial action should be taken, if required, seeking expert advice, if necessary. If it is found necessary to line the chimney then a flue liner suitable for solid fuel must be used in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the stove. If the stove is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.

If there is no existing chimney then either a prefabricated block chimney in accordance with Building Regulations Approved Document J or a twin walled insulated stainless steel flue to BS 4543 can be used. These chimneys must be fitted in accordance with the manufacturer's instructions and Building Regulations.

A single wall metal fluepipe is suitable for connecting the stove to the chimney but is not suitable for using for the complete chimney. The chimney and connecting fluepipe must have a minimum diameter of 150 mm and its dimension should be not less than the size of the outlet socket of the stove.

Any bend in the chimney or connecting fluepipe should not exceed 45°. 90° bends should not be used.

Combustible material should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the stove in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If it is found that there is excessive draught in the chimney then a draught stabiliser should be fitted. Fitting of a draught stabiliser will affect the requirement for the permanent air supply into the room in which the stove is fitted in accordance with Approved Document J (see also combustion air supply).

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe where it is not intended for the chimney to be swept through the appliance, also to permit visual checks on the integrity of the flue when the appliance is serviced.

Hearth

The hearth should be able to accommodate the weight of the stove and its chimney if the chimney is not independently supported. The weight of the stove is indicated in the brochure.

The stove should always be installed on a non-combustible hearth of a size and construction that is in accordance with the provisions of the current Building Regulations Approved Document J.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If the stove is to be installed on a combustible floor surface, it must be covered with a non-combustible material at least 12mm thick, in accordance with Building Regulations

Approved Document J, to a distance of 30 cm in front of the stove and 15 cm to each side measuring from the door of the combustion chamber

Combustion air supply

In order for the stove to perform efficiently and safely there should be an adequate air supply into the room in which the stove is installed to provide combustion air. This is particularly necessary if the room is double-glazed or a flue draught stabiliser is operating in the same room as the appliance. It may be necessary to increase the air vent size in property with low air permeability ($\leq$ 5.0 m^3 /($h.m^2$).
The provision of air supply to the stove must be in accordance with current Building Regulations Approved Document J. An opening window is not appropriate for this purpose.
IMPORTANT NOTE: If applicable and the appliance is being fitted within an existing fireplace recess, specialist advice should be sought before fitting any permanent ventilation within this area.

Connection to chimney

Stoves may have a choice of either a rear or top flue gas connector that allows connection to either a masonry chimney or a prefabricated factory made insulated metal chimney in accordance with their instructions. In some cases it may be necessary to fit an adaptor to increase the diameter of the flue to the minimum required 150 mm section of the chimney or liner.

Electrical Services

The installation of any electrical services during the installation of this appliance must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671

Carbon Monoxide Alarm

A carbon monoxide alarm complying with BS EN 50292 must be fitted in the same room as the appliance. It should be positioned on the ceiling at least 300mm from any wall or, if it is located on a wall, as high up as possible (above any doors and windows) but not within 150mm of the ceiling. The alarm should also be between 1m and 3m horizontally from the appliance.

Commissioning and handover

Ensure loose parts are fitted in accordance with the instructions given in the instruction booklet.

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, when a small fire may be lit and checked to ensure the smoke and fumes are taken from the stove up the chimney and emitted safely to atmosphere. Do not run at full output for at least 24 hours.

On completion of the installation and commissioning ensure that the operating instructions for the stove are left with the customer. Ensure to advise the customer on the correct use of the appliance with the fuels likely to be used on the stove and warn them to use only the recommended fuels for the stove.

Advise the user what to do should smoke or fumes be emitted from the stove. The customer should be warned to use a fireguard to BS 8423:2002 in the presence of children, aged and/or infirm persons.

SUPPLEMENTARY OPERATING INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE INSTRUCTION BOOKLET

READ THE INSTRUCTION BOOKLET AND THESE INSTRUCTIONS CAREFULLY BEFORE USING THE STOVE

WARNING NOTE

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. In the event of fume emission from the appliance, then the following immediate action should be taken: -

(a) Open doors and windows to ventilate room and then leave the premises
(b) Let the fire go out
(c) When safe to do so, check for flue or chimney blockage and clean if required
(d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean at all times.

IMPORTANT NOTES

General

Before lighting the stove check with the installer that the installation work and commissioning checks described in the installation instructions have been carried out correctly and that the chimney has been swept clean, is sound and free from any obstructions. As part of the stoves' commissioning and handover the installer should have shown you how to operate the stove correctly.

CO Alarm

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under "Warning Note" above.

Use of fireguard

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002 (Replaces BS 6539).

If the fire is left unattended a spark guard to BS 3248, specification for spark guards for use with solid fuel appliances should be used.

Chimney cleaning

The chimney should be swept at least twice a year. It is important that the flue connection and chimney are swept prior to lighting up after a prolonged shutdown period.

If the stove is fitted in place of an open fire then the chimney will require sweeping after a month of continuous operation. This is a precaution to ensure that any "softer" deposits left from the open fire usage have not been loosened by the higher flue temperatures generated by the closed stove.

In situations where it is not possible to sweep through the stove the installer will have provided alternative means, such as a soot door. After sweeping the chimney the stove flue outlet and the flue pipe connecting the stove to the chimney must be cleaned with a flue brush.

The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise

smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been "authorised" in Regulations and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.

Rais Pilar 13 L & H
These have been recommended as suitable for use in smoke control areas when burning wood. The air controls are factory set to allow a certain amount of combustion air when the controls are fully closed, the controls must not be modified in any way.

Further information on requirements of the Clean Air Act can be found at: http://smokecontrol.defra.gov.uk/ Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements

Special Notes for use in a Smoke Control Area:

Refuelling on to a low fire bed:
If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke

Fuel overloading:
The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke. (See Page 9 for Refuelling details).

Operation with door left open:
Operation with the door open can cause excess smoke. The appliance must not be operated with the appliance door left open except as directed in the instructions.

Dampers left open:
Operation with the air controls or dampers open can cause excess smoke. The appliance must not be operated with air controls or dampers left open except as directed in the instructions.

Periods of Prolonged Non-Use

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

Extractor fan

There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit smoke and fumes into the room.

Aerosol sprays

Do not use an aerosol spray on or near the stove when it is alight.

Use of operating tools

Always use the operating tools provided when handling parts likely to be hot when the stove is in use.

Chimney Fires

If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur turn off the stove immediately and isolate the mains electricity supply (if applicable), and tightly close the doors of the stove. This should cause the chimney fire to go out. If the chimney fire does not go out when the above action is taken then the fire brigade should be called immediately. Do not relight the stove until the chimney and flueways have been cleaned and examined by a professional.

Permanent air vent

The stove requires a permanent and adequate air supply in order for it to operate safely and efficiently. In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

USER OPERATING INSTRUCTIONS - WOOD

Please read the important notices given above before referring to the main instruction book for detailed operating instructions.

HETAS Ltd Approval

These appliances have been approved by HETAS Ltd as intermittent operating appliances for burning wood logs only. Approval does not cover the use of other fuels either alone or mixed with the recommended fuel, nor does it cover the instructions for the use of other fuels. (Note the Q-Tee II model only is also approved for use with approved mineral fuels.)

Recommended fuels

These stoves are designed to burn dry seasoned wood logs only, as indicated in the main stove manuals. The maximum length of the firewood should be the width of the combustion chamber minus 50-60mm (250mm approx).

Door operation

The door handle may become hot during operation, use the tool to open and close the doors, if appropriate.

Lighting of fire

Place some firelighters or paper and dry kindling wood on the grate and cover with a small amount of fuel. Set air controls to maximum and set light to firelighters or paper. Close the doors and allow fire to burn until fuel is well alight then load with more fuel and adjust air controls to the required level of heat output.

Before relighting the fire clean the firebed of ash and clinker and empty the ashpan.

Refuelling

Keep the firebox well filled (the fuel may be sloped up from the front firebars), but do not allow fuel to spill over the top of the front fire bars. Take care that fuel does not project over the front fire bars or damage to the glass may be caused when the doors are closed.

Flueway cleaning

It is important that the baffle plate and all the stove flueways are kept clean. When burning smokeless fuels they should be cleaned at least monthly. When burning other fuels they should be cleaned at least once a week, and more frequently if necessary.
Remove any sooty deposits from the baffle plate until they fall off into the fire.
More soot will be deposited on the baffle plate and in the flueways if the stove is run at low levels for long periods. If this is the case then more frequent cleaning will be necessary.

Cleaning and maintenance

The instructions detailed in the section “Maintenance” in the instruction booklet should be followed.

Spare Parts

Spare parts can be obtained from Robeys Limited 01773 820 940

Trouble shooting

The instructions detailed in the relevant section in the instruction booklet should be followed together with the following additional items:

1. **Fire Will Not Burn**
   Check that:
   a) the air inlet is not obstructed in any way,
   b) that chimneys and flueways are clear,
   c) that a suitable fuel is being used,
   d) that there is an adequate air supply into the room,
   e) that an extractor fan is not fitted in the same room as the **fire.**

2. **Fire Blazing Out Of Control**
   Check that:
   a) the doors are tightly closed,
   b) the air control is turned down to the minimum setting,
   c) the air inlet damper is closed and that it is not prevented from closing completely by a piece of ash,
   d) a suitable fuel is being used,
   e) the door seals are in good condition.

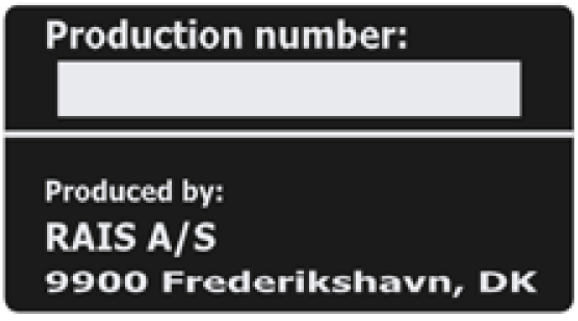
Introduction

Thank you for purchasing a RAIS wood burning stove.

A RAIS wood burning stove is more than just a heat source:
it also shows that you care about design and quality in your home.

To make the most of your wood burning stove it is important that you read the manual thoroughly, before installing and using it.

In the case of warranty coverage, and for general queries regarding your wood burning stove, it is important that you know the stove's production number. We therefore recommend that you note down the number in the table below. The production number is located on the back of the stove at the bottom.



Date: Distributor:

WARRANTY

RAIS/attika – wood-burning stoves are tested repeatedly in terms of safety, as well as material and manufacturing quality. We grant warranty on all models, starting with the date of installation.

The warranty refers to:
- documented malfunctions due to faulty manufacture
- documented material defects

The warranty does not cover:
- door and glass seals
- ceramic glass
- chamber lining
- appearance of the surface structure or natural stone texture
- appearance or changes of colour of the stainless steel or patina surfaces
- expansion noise

The warranty is invalidated in case of:
- damages, caused by overfiring
- damages, caused by external influence and the use of unsuitable fuels
- non-observance of statutory or recommended installation guidelines, and modifica-tons to the wood-burning stove
- non-observance of service and care provisions

Please contact your retailer in the event of damage. We determine the way to repair the damage, in case of warranty claims. In the event of repair, we ensure proper and profes-sional execution.

Warranty claims submitted for additionally delivered or repaired parts are subject to na-tional/EU laws and regulations in terms of renewed warranty periods.

Please contact RAIS A/S for the applicable warranty provisions.

Specifications

	PILAR 13 L PILAR 153	PILAR 13 H PILAR 180
Nominal output (kW):	4.8	
Min./Max. output (kW):	3 - 6	
Heating area (m^2):	45-90	
Stove's width/depth/height (mm):	Ø456-1530	Ø456-1800
Combustion chamber's width/depth/height (mm):	308-225-383	
Recommended amount of wood when fuelling (kg). Distributed on 1-2 logs of wood of approx. 25 -30cm	1.1	
Min. uptake / Min. draught (Pascal):	-13	
Weight (kg):	ca. 144 kg	ca. 153 kg
Efficiency (%):	83	
CO-emission at 13% O_2 (%)	0.071	
NOx-emission at 13% O_2 (mg/Nm^3):	84	
Particles emission acc. to NS3058/3059 (g/kg):	1.897	
Dust measured acc. to Din+ (mg/Nm^3):	8	
Smoke gas mass flow (g/s):	4.2	
Smoke gas temperature (°C):	220°	
Intermittent operation:	Refuelling should be undertaken within 1½ hours.	

DIstances

See drawing of the stove in front of the manual. All dimensions are stove dimensions without handle and set screws. Placing the stove on set screws/rotary base, will affect the height.

I: Distance from floor to centre smoke outlet top
J: Distance from floor to centre smoke outlet back
K: Distance from back side to air intake bottom (air system)
L: Distance from floor to air intake back side (air system)
M: Distance from centre smoke outlet top to rear edge of top plate
N: Distance from side to air intake bottom (air system)

Installation instructions

The following pages give instructions for the safe and proper installation of this heating appliance in the UK. These instructions cover the basic principles of installation, although detail may need slight modification to suit particular local site conditions. In all cases the installation must comply with current UK Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove. Please note that it is a legal requirement under England and Wales Building Regulations that the installation of the stove is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

It should be noted that the current Building Regulations requirements are given in Approved Document J. These requirements may also be met by adopting the relevant recommendations given in British Standards BS 8303 and BS EN 15287-1.

WARNING: Health and Safety Advice Notice
The installation of this heating appliance is governed by the Health and Safety at Work Act 1974. It is the responsibility of the installer to ensure that all requirements of this Act are met during the installation works. Attention is drawn in particular to the following:

Handling
The appliance is a heavy item and adequate facilities must be available for loading, unloading and site handling.

Fire Cement
Some types of fire cement are caustic and should not be allowed to come into contact with the skin. Protective gloves should be worn when handling fire cement. In case of contact with the skin wash immediately with plenty of water.

Asbestos
This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

Metal Parts
When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

Important Warning –Preparatory Work and Safety Checks:

- This stove must not be installed into a chimney that serves any other heating appliance.
- It's recommended not have an extractor fan fitted in the same room as the stove as this can cause the stove to emit fumes into the room.
- If this appliance is installed into an existing chimney, the chimney must first be swept and examined for soundness and suitability before the appliance is installed (see also section headed "Chimney").

Convection

RAIS/attika stoves are convection stoves. This means that the stove's back and side panels are not over-heated. Convection means that there is a circulation of air, which ensures that the heat is distributed more evenly throughout the entire room. The cold air is sucked in at the base of the stove up through the convection channel, which runs along the stove's combustion chamber. The heated air pours out at the top of the stove, which ensures a circulation of warm air throughout the room.

Chimney

The chimney is the driving force which makes the stove function. In order for the stove to perform satisfactorily the chimney height must be sufficient to ensure the correct draught of 14 to 18 Pa so as to clear the products of combustion and prevent problems of smoke emanating into the room when firing.
NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in BS 5854:1980 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

If installation is into an existing chimney then it must be sound and have no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large i.e. more than 230 mm x 230 mm. Remedial action should be taken, if required, seeking expert advice, if necessary. If it is found necessary to line the chimney then a flue liner suitable for solid fuel must be used in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the stove. If the stove is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.

If there is no existing chimney then either a prefabricated block chimney in accordance with Building Regulations Approved Document J or a twin walled insulated stainless steel flue to BS 1856-1 can be used. These chimneys must be fitted in accordance with the manufacturer's instructions and Building Regulations.

A single wall metal fluepipe is suitable for connecting the stove to the chimney but is not suitable for using for the complete chimney. The chimney and connecting fluepipe must have a minimum diameter of 125 mm. Any bend in the chimney or connecting fluepipe should not exceed 45°. 90°bends should not be used.

Combustible material should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the stove in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If it is found that there is excessive draught in the chimney then either an adjustable flue damper or alternatively a draught stabiliser should be fitted. The adjustable flue damper should not close off the flue entirely but should in its closed position leave a minimum continuous opening free area of at least 20 % of the total cross sectional area of the flue or fluepipe.
Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe.

You should also familiarise yourself with the draught conditions for chimneys with 2 flues.

The flue outlet spigot is either 150 mm (6”) in diameter, or 129 mm (5”) in diameter.

For strong draughts, the chimney or flue should be fitted with a draught stabiliser. In which case, it is important to ensure that there is a free flow-through area of minimum 20 cm² when the regulating gate is shut. Otherwise, the fuel energy may not be used optimally. If, at any time, you are unsure about the condition of the chimney, you should contact a chimney sweep.

Remember that access to the access door should be kept clear.

Installation

The stove can be delivered with a premounted swivel base.If the stove is delivered with a swivel base, it is preassembled to turn 66° (33° to each side). The swivel base can be changed to a 360° version by removing a locking screw at the bottom of the stove. See separate instructions in the next section.

The PILAR 13 is a free standing stove.

This appliance may only be installed by a qualified Rais dealer/installer.

The stove must be set up and installed in accordance with all current national and local rules and reulations. Local authorities and a chimney specialist should be contacted prior to set up.

It is prohibited to carry out unauthorised alterations to the stove.

There must be plenty of fresh air in the room where the stove is being installed, in order to ensure proper combustion. Note that any mechanical exhaust ventilation - e.g. an extraction hood - may reduce the air supply. Any air grates must be placed in such a manner, that the air supply is not blocked.

The floor structure must be able to carry the weight of the wood burning stove, as well as the weight of a chimney, if necessary.

The stove is placed on fireproof material.

When you choose where to set up your RAIS/attika wood burning stove, you should consider the heat distribution to the other rooms. This will enable you to get the best use out of your stove.
The stove should be set up at a safe distance from inflammable materials.

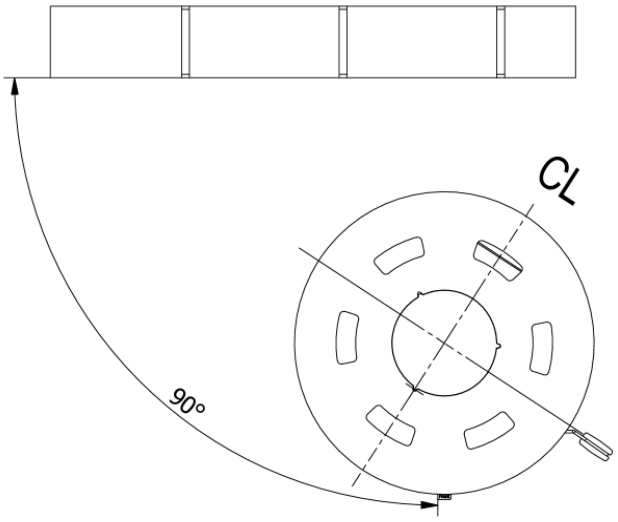
See the manufacturer's plate on the wood burning stove.

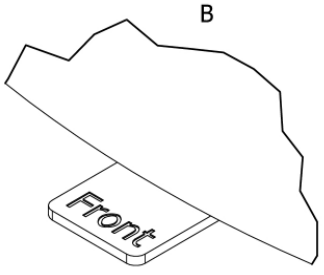
Upon receiving the stove must be inspected for defects.

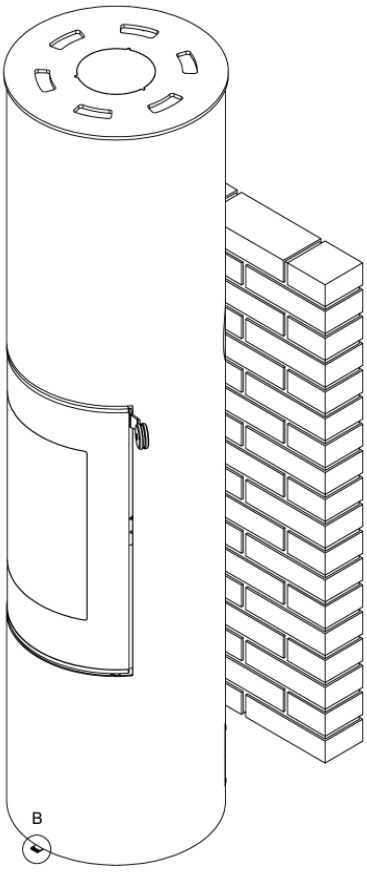
NOTE!!
This appliance may only be installed by a qualified RAIS dealer/installer.
See www.rais.com for dealer list.

Installation of stove with swivel base

The stove is installed as shown in relation to the back wall.
Make sure the marker (FRONT) is perpendicular to the rear wall (shown as 90 °).
The stove with its center line (CL) is now in its far left position (33 °).
The marker indicates the center line of the swivel range.
The stove can rotate 33 ° to either sides of the center line.

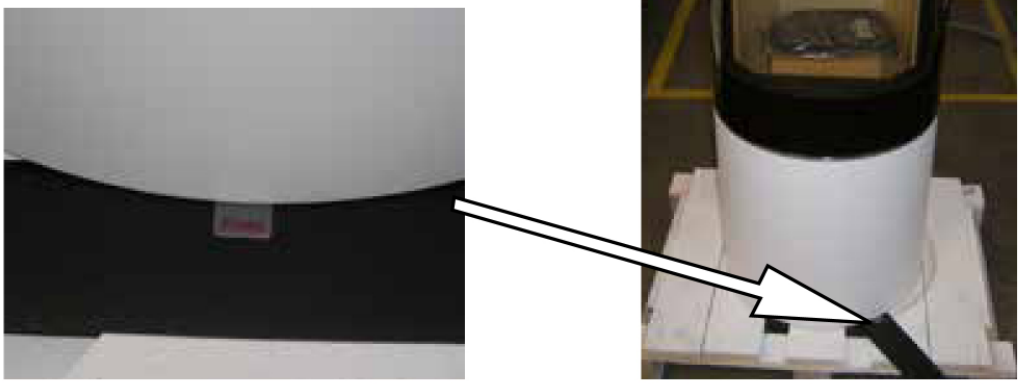






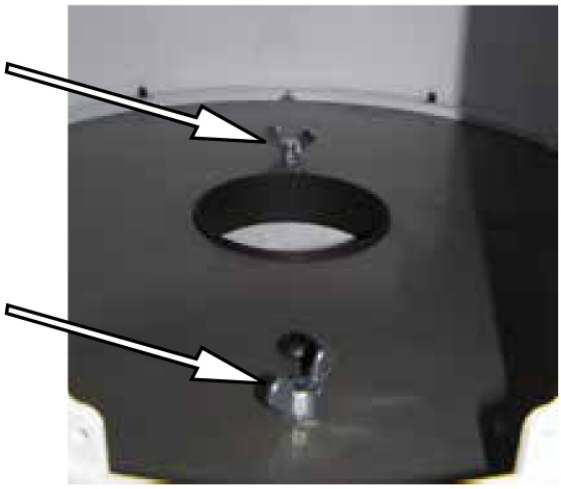
Swivel base for 66° turning.

If the stove is supplied with a swivel base mounted, a marker is placed at the bottom front of the stove.



Remove the back side plate on the stove.

Remove the two thumbscrews (transport safety).
Check the function of the swivel base.
Mount the plate on the back again.

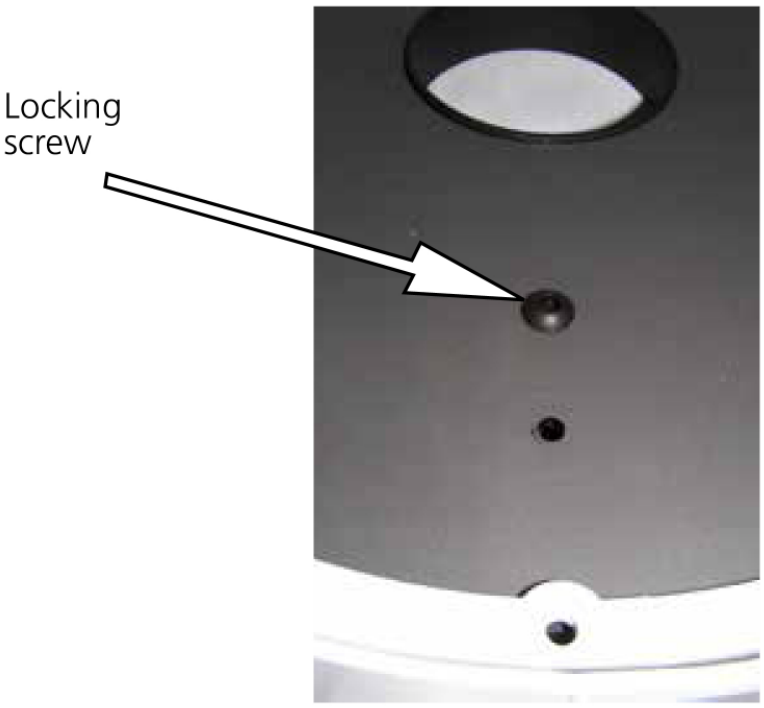


The stove can now be turned
to both sides by 33 °

The marker in front of the oven can be removed by pulling it.

Swivel base for 360° turning.

If the stove has to turn all the way around,
remove the locking screw.
Check the function of the swivel base.



The marker in front of the oven can be removed by pulling it.

Installation distance

To determine whether the wall next to where the stove is going to be installed is flammable, you should contact your building contractor or the local building authorities.

The hearth should be able to accommodate the weight of the stove. The chimney must be independently supported by wall brackets or a ceiling support plate. The weight of the stove is indicated in the brochure.

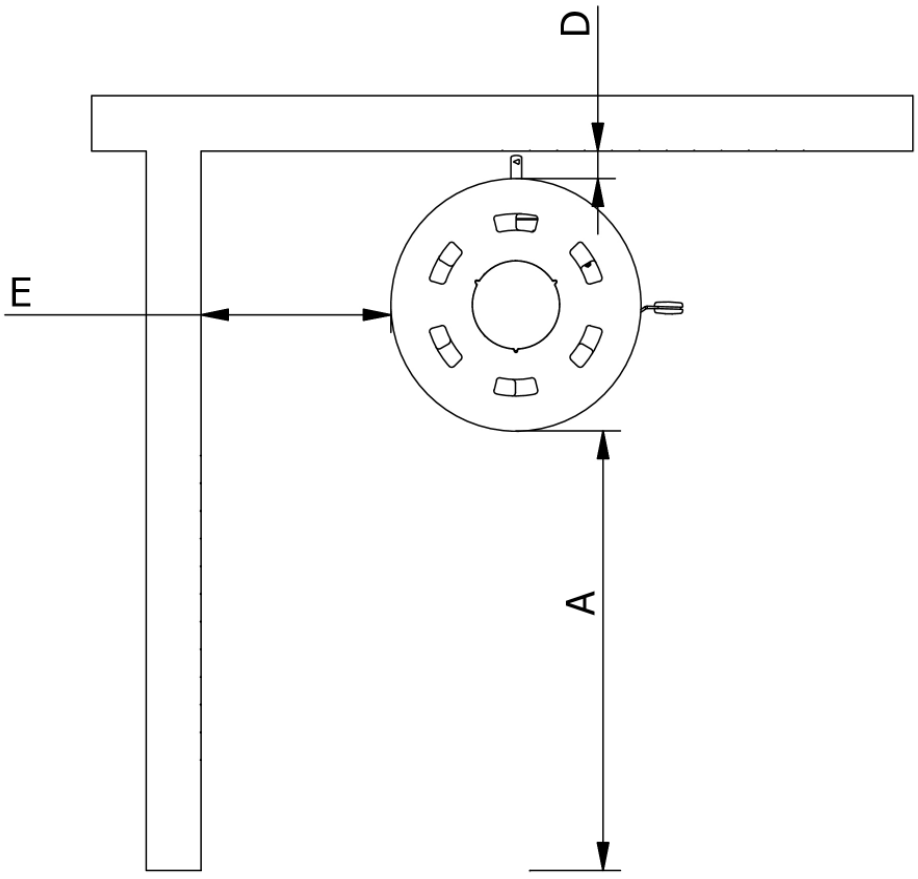
The stove should always be installed on a non-combustible hearth of a size and construction that is in accordance with the provisions of the current UK Building Regulations Approved Document J.

If the stove is to be installed on a wooden floor, it must be covered with a non-combustible material at least 12 mm thick, in accordance with UK Building Regulations Approved Document J, to at distance of 300 mm in front of the stove and 150 mm to each side measuring from the door of the combustion chamber.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in UK Building Regulations Approved Document J and also in these stove instructions.

Installation distance in case of combustible wall

Normal set-up - corner setting	Uninsulated flue
A. Distance to furniture (min.)	850 mm
Distance to flammable materials (min.)	
B. in front (floor)	if distances are not shown, national/local regulations are followed
C. to the side (floor)	if distances are not shown, national/local regulations are followed
D. to the rear (wall)	50 mm
E. to the side of the wall	350 mm
Stove with swivel base (66°)	
D. to the rear (wall	50 mm
E. to the side of the wall	600 mm



Corner setting 45°

Uninsulated flue

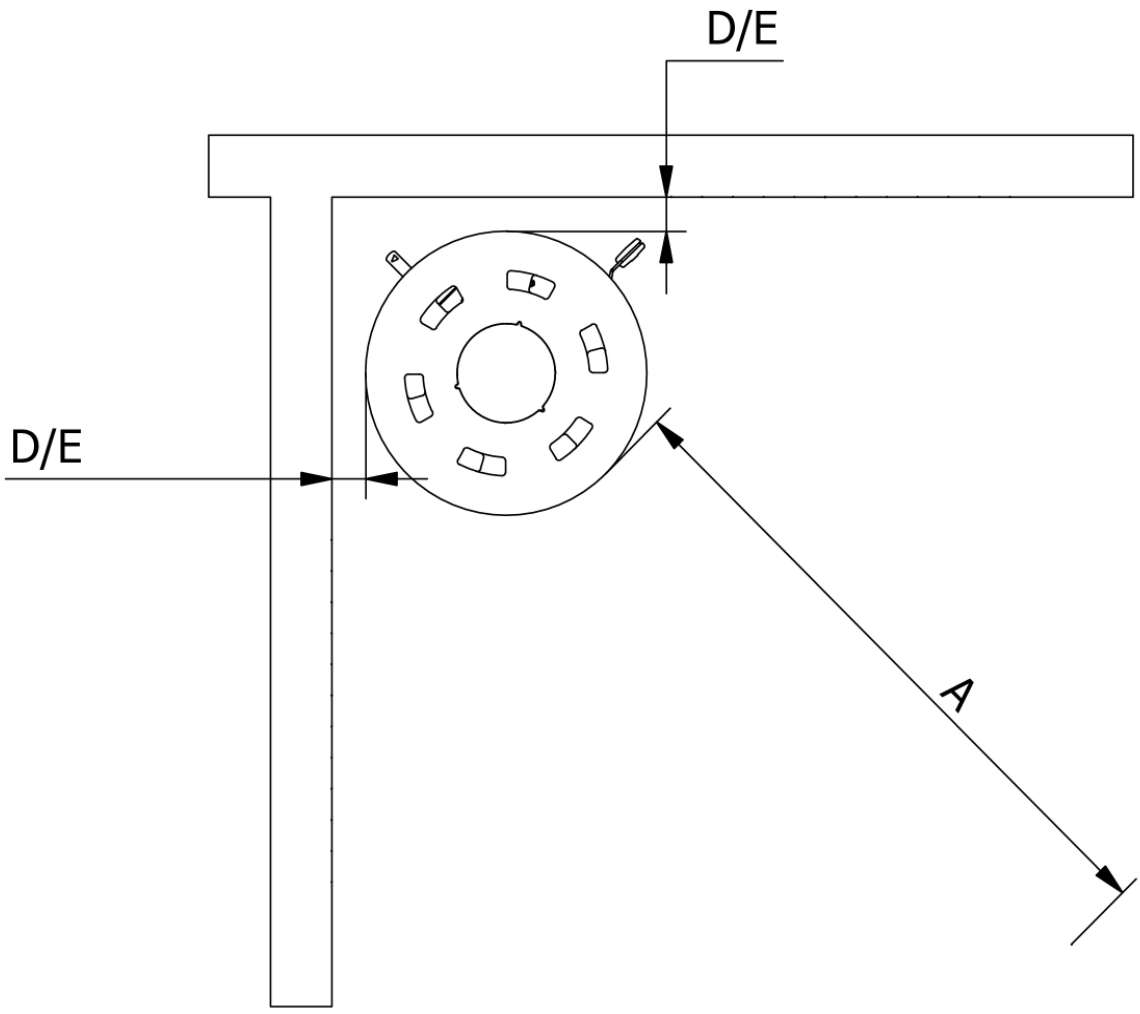
A. Distance to furniture (min.)	850 mm

Distance to flammable materials (min.)

B. in front (floor)	if distances are not shown, national/local regulations are followed
C. to the side (floor)	if distances are not shown, national/local regulations are followed
D. to the rear (wall)	50 mm

Stove with swivel base (66°)

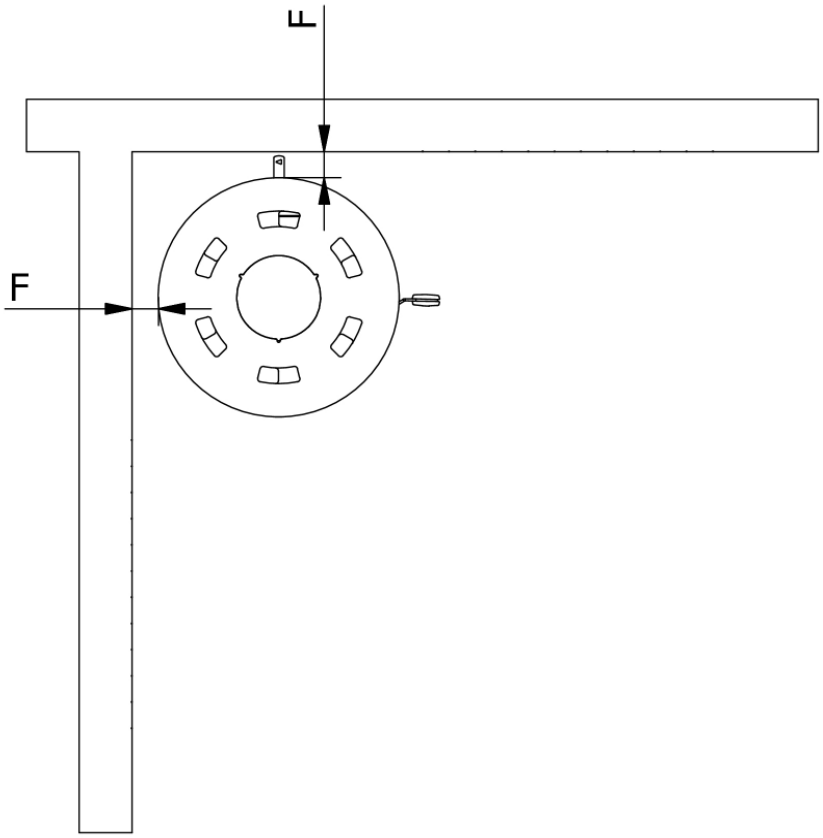
E. to the side of the wall	600 mm



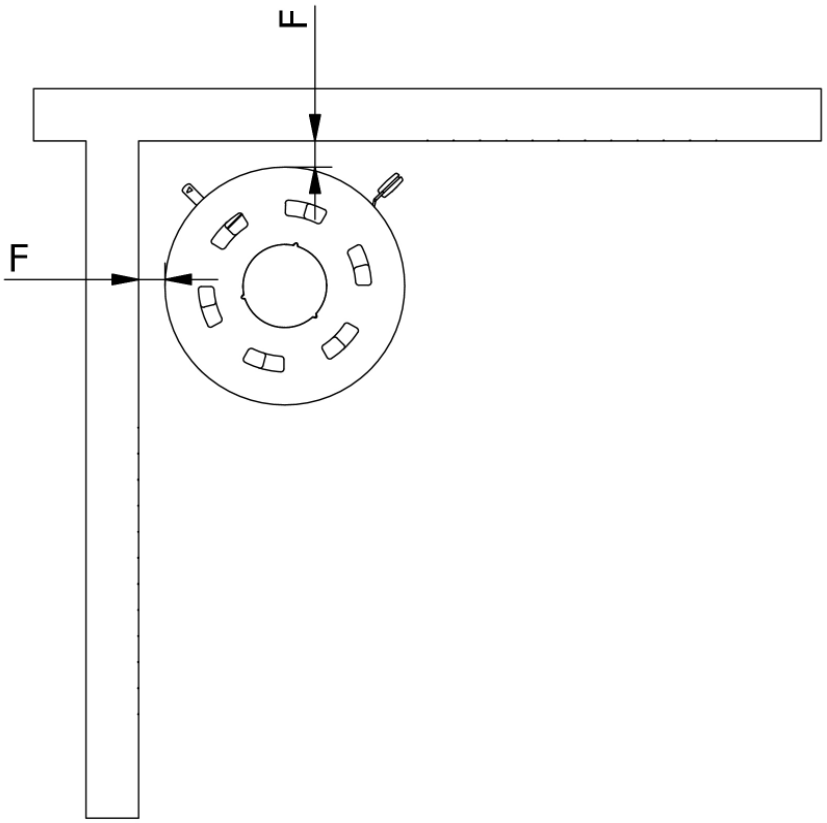
Installation distance in case of non-combustible wall

We recommend a minimum distance to non-combustible material of 50 mm (F) for cleaning considerations.
It should always be possible to access the access door.

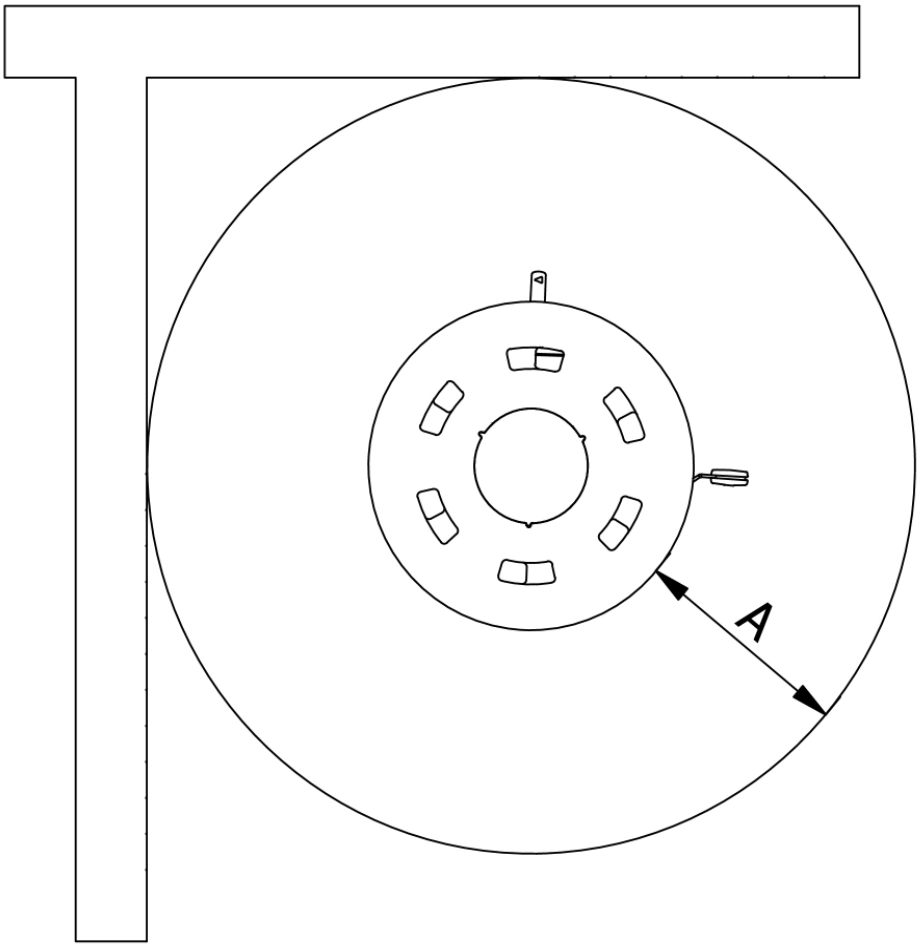
Normal corner setting and with swivel base (66°)



Corner setting 45° and with swivel base (66°)



360° swivel base	Uninsulated flue
A. Distance to furniture (min.)	850 mm
Distance to flammable materials (min.)	
B. in front (floor)	if distances are not shown, national/local regulations are followed
C. to the side (floor)	if distances are not shown, national/local regulations are followed



For the Installer

Finally before firing the stove for the first time a check should be made to ensure that the assembly and stove installation has been satisfactory and that there are no leaks in any seals in the appliance and appliance connections to the chimney.

Ensure that the appliance and chimney flue are functioning correctly before finally handing over to the user. If necessary read the later parts of this manual for guidance on care required when first lighting.

Inform the user that the appliance has been commissioned and ready to use and give instruction on the safe operation of the stove.

These Instructions must be left with the user and the user should be instructed to keep them in a safe place.

Operating instructions

Please note that HETAS Ltd Appliance Approval only covers the use of dry seasoned wood logs on this appliance. HETAS Ltd Approval does not cover the use of other fuels either alone or mixed with the wood logs, nor does it cover instructions for the use of other fuels.

Fuel

The stove is designed and approved in accordance with EN 13240 and NS 3058 for stoking split, dried firewood. The firewood must have a water content of 15-22% and its max. length should be the width of the combustion chamber minus 50-60 mm.

Stoking with wet firewood causes both soot, environmental pollution and bad fuel economy. Freshly cut wood contains approx. 50-70% water and is thoroughly unsuitable for stoking. Count min. 1-2 years of storage time for newly cut wood before using. Wood with a diameter of more than 100 mm should be split. Regardless of wood size, it should always have at least one surface area free of bark.

We do not recommend stoking with painted, laminated or impregnated wood, wood with a synthetic surface, painted refuse wood, chipboard, plywood, domestic waste, paper briquettes and pit coal, as this will produce malodorous smoke, which could be poisonous.

When firing with the above-mentioned items and amounts larger than those recommended, the stove is subjected to a larger amount of heat, which results in a higher chimney temperature and lower efficiency. This can result in the stove and chimney becoming damaged and would void the warranty.

The calorific value of the firewood is closely connected to the moisture level of the firewood. Moist firewood has a low heat value. The more water the wood contains, the more energy it takes for this water to vaporise, resulting in this energy being lost.

ONLY USE RECOMMENDED FUELS

The following table shows the calorific value of different types of wood, which have been stored for 2 years, and which have a residual moisture of 15-17%.

Wood	Kg dry wood pr. m^3	compared to beech/oak
Hornbeam	640	110%
Beech and oak	580	100%
Ash	570	98%
Maple	540	93%
Birch	510	88%
Mountain pine	480	83%
Fir	390	67%
Poplar	380	65%

1 kg of wood yields the same heat energy irrespective of wood type.
1 kg beech merely takes up less space than 1 kg of fir.

Drying and storage

Drying wood takes time. Proper air drying takes approx. 2 years.

Here are some tips:

- Store the wood sawn, split and stacked in an airy, sunny place, which is protected against rain (the south side of the house is particularly suitable).
- Store the firewood stacks at a hand's breadth apart, as this ensures that the air flowing through takes the moisture with it.
- Avoid covering the firewood stacks with plastic, as this prevents the moisture from escaping.
- It is a good idea to bring the firewood into the house 2-3 days before you need it.

Room ventilation and stoves

There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit smoke and fumes into the room.

The stove requires a permanent and adequate air supply in order for it to operate safely and efficiently.
In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

Automatic regulation of combustion air

This stove is equipped with an independent and self-regulating air damper.
Hence there is no damper handle.

When the stove is cold the damper is fully open (full primary and full secondary air). Upon heating the damper gradually closes the primary and secondary air, but opens up the tertiary air.

The primary air is added to the primary combustion zone at the bottom of the burning chamber, i.e. the bed of glowing embers. This cold air is only used in the lighting stage.

Secondary air is air added in the gas combustion zone, i.e. air which contributes to the combustion of the pyrolysis gasses (preheated air, which is used for the cleaner glass system and combustion). This air is sucked through the damper and is pre-heated through the side channels and then emitted as hot scavenging air onto the glass. The hot air rinses the glass and keeps it soot-free.

Tertiary air at the back of the burning chamber at the top (2 rows of holes) ensures the combustion of the final gas residues.

The pilot nozzles are placed in the back plate and front of the combustion chamber. They ensure that the bed of glowing embers is fed with air and therefore holds a high temperature. It provides a quick start when refuelling and ,. reduces the risk of fire going out.

A clean combustion is indicated by clear yellow flames.

First usage

A careful start pays off. Start with a small fire, so that the wood burning stove can get accustomed to the high temperature. This gives the best start and any damage is avoided.

Be aware that a strange but harmless odour and smoke concoction may emanate from the surface of the stove, the first time you fire up. This is because the paint and materials need to harden. The odour disappears quickly, but you should check the ventilation and draught, if possible. See also, the IMPORTANT warning notice below about persistent fumes.
During this process you must be careful not to touch the painted surfaces, and it is recommended that you regularly open and close the door to prevent the door seal from sticking.

The stove may also produce “clicking noises” during heating and cooling, caused by the large temperature differences which the material is subjected to.

Never use any type of liquid fuel for kindling or maintaining the fire. There is a danger of explosion.

The stove gets very hot when in use always wear protective gloves when tending the stove.

If the stove has not been used for a while, follow the steps as if you were using it for the first time.

IMPORTANT - Warning Note!

Properly installed, operated and maintained this appliance will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, the following immediate actions should be taken:

1. Open doors and windows to ventilate room.
2. Let the fire out or eject and safely dispose of fuel from the appliance.
3. Check for flue or chimney blockage, and clean if required.
4. Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

1

2

3

4

5

IMPORTANT - Warning Note!

Do not use an aerosol spray on or near the stove when it is alight.

IMPORTANT - Safety advice!

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002 (Replaces BS 6539).

Lighting and fuelling

NOTE: If airsystem is connected, the valve must be open.

TIPS before firing up:

Open a door or window close to the wood burning. If there is a "storm" in the stove coming from the chimney, it is advisable to place a screwed-up piece of newspaper between the upper baffle plate and the chimney, set the paper on fire, and wait until you hear a "rumbling" noise in the chimney. This means that there definitely is a draught in the chimney and you avoid smoke in the room.

"Top-Down" lighting (see photos at the front of manual)

- Open the door fully until it is locked in the open position.
- Start by placing approx. 1 kg of wood (i.e. 2 pcs. of split logs) at the bottom of the combustion chamber. Place approx. 1.2 kgs of dry firewood, split into kindling sticks, on top the logs and a couple of fire lighters or similar (photo 1).

- Light the fire (photos 2-3)
- Close the door and leave it ajar by pulling the door handle.

- Close the upper convection plate of the stove. - if mounted - (turn handle clockwise).This ensures a faster heating of the stove.

- When the fire has caught the kindling wood (photo 4) close the door completely (after approx. 3-10 min., depending on the draft conditions in the chimney).
- When the last flames are extinguished and there is a nice layer of embers (photo 5), add 1-2 pieces wood - about 1-1 ½ kg. (photo 6).
- Close the door completely.
- If necessary keep the door open for a few minutes to start the fire. (photo 7).

- The upper convection can now be opened again (turn handle counterclockwise). Hereby more warm air will emit to the dwelling.

NOTE!!

If the fire has burned down too low (too small an ember), it may take longer time to get the fire going again.

When re-lighting it helps to close the upper convection. This ensures a faster heating of the stove.

When firing the smoke out of the chimney should be almost invisible; just a 'flicker' in the air is opserved.
When refueling, open the door carefully to avoid smoke escaping. Never add wood while it is burning (flames!) in the stove.

RAIS recommends to refuel with 1-2 pieces wood - approx. 1-1 ½ kg - within 1½ hours (intermittent operation).

ATTENTION!!

Keep an eye on the stove when lighting.
During operation the door should always remain shut.

Control

Look for signs that indicates a correct firing in the stove:

- ash is white
- the walls of the combustion chamber is free of soot
- the wood is sufficiently dry

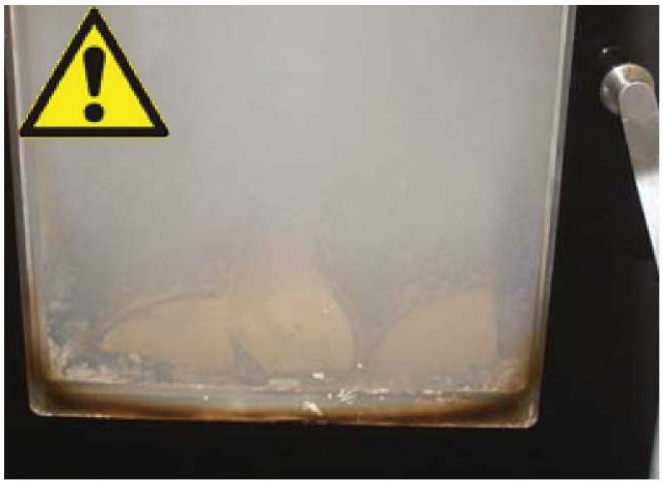
Warning!!

If the firewood is only burning slowly without flames or is smoking, and too little air is added, unburned exhaust gasses are developed.
Exhaust gasses can be ignited and explode, leading to damage to material and possibly personal injury.

If there are only a few embers remaining you must light the fire again.

If you just add firewood the fire will not be lit, but unburned exhaust gasses will develop.

Here firewood has been added to an ember layer which is too small, and the air flow is too small - smoke is developed.



Avoid heavy smoke - danger of exhaust gas explosion.

In case of very heavy smoke, open the door and light the fire again.

Cleaning and care

Glass

Most woodstoves use a ceramic glass product which is resistant to heat but requires cleaning to keep its appearance.
Soot or opaque marks can easily cleaned if the marks are fresh, however If you leave the glass dirty for any length of time the acid from the wood can etch the surface of the glass permantley (wet unseasoned wood, soft wood such as used in the building industry, pallet wood should be avoided).
Only clean when cold.

Use only stove glass cleaners to re-move heavy tar/ soot deposits.
All other marks can normally be removed with a damp cloth, then dry with a clean cloth or newspaper, do not let the glass dry before applying a dry clean cloth.
With more stubborn marks i.e. opaque areas/frosting, you need put a small amount of wood ash on a clean damp cloth. If the opaque mark/frosting doesn't come out, contact your dealer for a special remover.

Paint finish

The appliance has been coated with a high temperature paint which can last for years. Do not clean with a damp cloth or any cleaning products as they can cause rust or discolouration. Only clean when cold use a brush with soft bristles or dust with a lint free cloth. Only re-spray when necessary.

The wood burning stove and the chimney must be serviced by a chimney sweep twice a year. During cleaning and care, the stove must be cold.

Prolonged period of non-use:

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

Prior to a new heating season, it should be checked that the chimney and smoke gas connector are not blocked.

Maintenance/spare parts

Especially movable parts wear down during frequent use. Door seals are also wear parts. Only use original spare parts. We recommend service performed by your dealer after completion of a heating period.

Combustion chamber lining

The combustion chamber lining protects the body of the wood-burning stove against the heat from the fire. The large temperature fluctuations may result in cracks in the plates of the combustion chamber lining, which however have no effect on the functional capacity of the wood-burning stove. They do not have to be replaced unless they are crumbling away due to many years of use. The plates of the combustion chamber lining are only inserted and are easy to replace by your dealer or yourself.

Movable parts

Door hinges and door locks require lubrication once a year. We recommend that only our own lubricating spray is used, as the use of other products may lead to the formation of odours and residues. Contact your dealer to obtain the lubricating spray.

Cleaning the combustion chamber

Scrape/shovel the ash out and store it in a non-flammable container until it has cooled down. You can dispose of ash with your normal household waste.

REMEMBER!!
Never remove all the ashes from the combustion chamber - the wood will burn at its best with a layer of ashes of approx. 20 mm.

Cleaning of flue ways

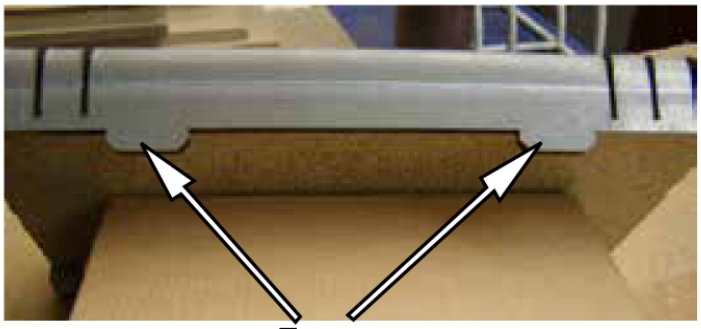
In order to acces the flue way remove the smoke converter plate (vermiculite) og smoke chikane (steel plate with vermiculite).

Gently remove the smoke converter plate (vermiculite) by tilting it to one side and turning it a little slantwise.
Pull out the plate carefully.

The smoke chikane is lifted, tilted to one side, lowered and removed.

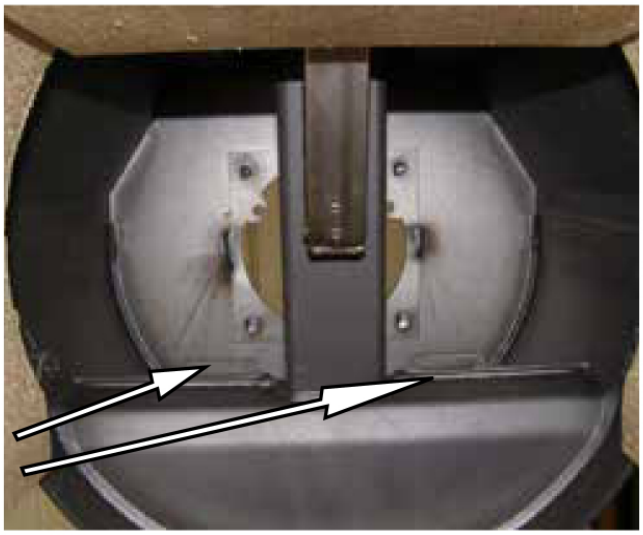
Remove dirt and dust, and mount the parts in reverse order.

NOTE!!
Be careful when replacing the smoke converter plate and smoke chikane
Make sure that the tabs from on the smoke chikane 'catches' the holes in the stove.



Tap

Holes



Front of stove-bottom view

Interruption of operation

Smoke spillage around door

could be due to too low draught in the chimney <12Pa

- check whether the flue or chimney is blocked
- check whether the extraction hood is switched on; if it is, switch it off and open a window/door in the proximity of the stove for a short while.

Soot on glass

could be caused by the firewood is too wet.

- make sure that the stove is heated properly when firing up, prior to closing the door

Stove is burning too strong

could be caused by:

- leak around the door seal
- chimney draught too large >22 Pa, draught control regulator should be installed.

Stove is burning too weakly

could be caused by:

- too small amount firewood
- too little air supply for room ventilation
- unclean smoke channels
- leaky chimney
- leakage between chimney and flue

If your stove continues to malfunction, we recommend that you contact your RAIS distributor or chimney sweep.

WARNING!!

If incorrectly or too damp firewood is used, it can lead to excessive formation of soot in the chimney and possible a chimney fire:

- in this case shut off all air supply from outside (if installed) to the stove
- contact the fire department
- never attempt to put out fire with water!
- afterwards, you should ask your chimney sweeper to check the stove and chimney

IMPORTANT!!

- to ensure safe burning there must be clear yellow flames or clear embers at all times.
- the firewood should not be smouldering.

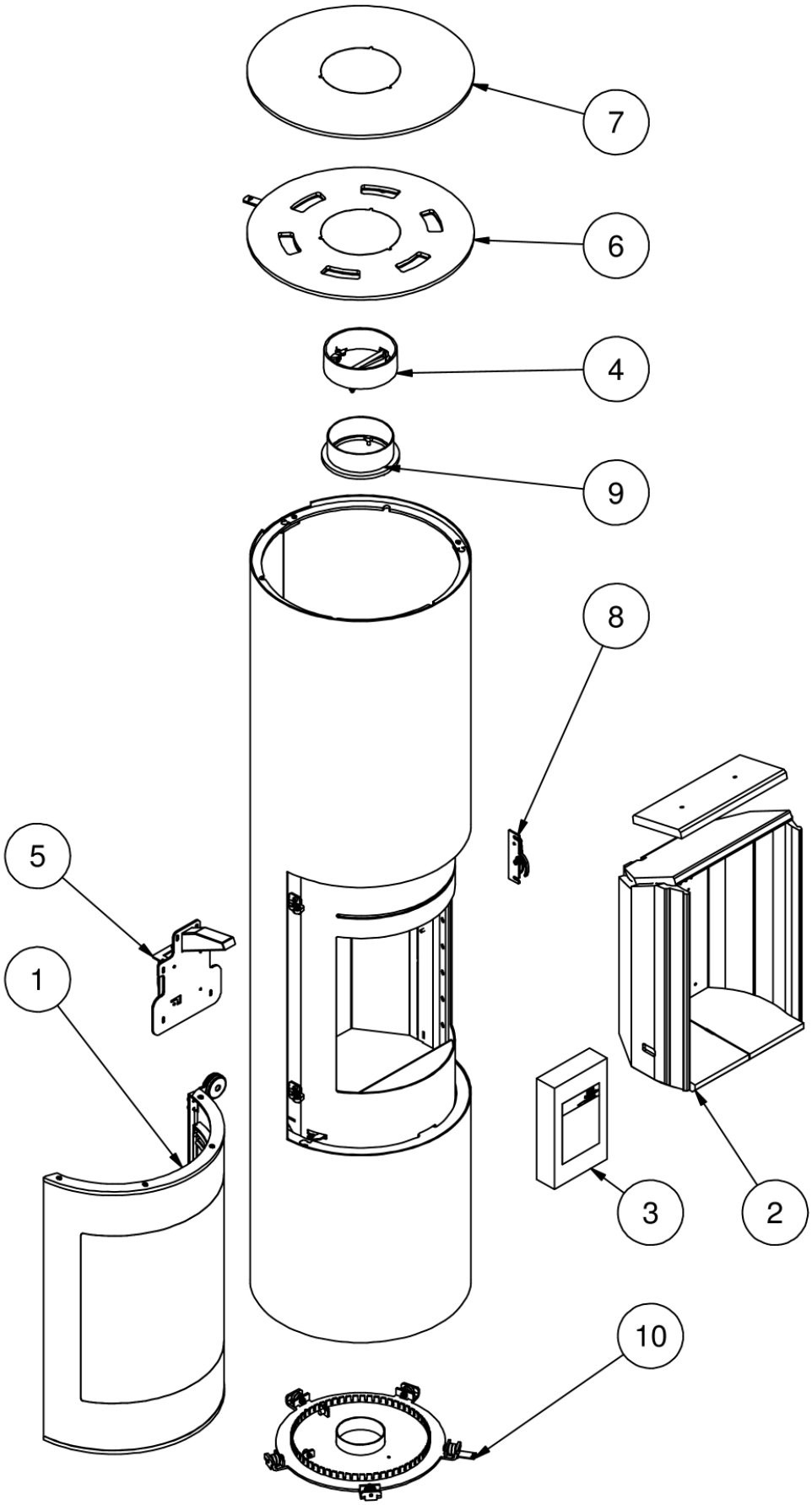
Spare parts New PILAR / PILAR 13 L / PILAR 13 H

If spare parts other than those recommended by RAIS are used, the warranty is voided.
All replaceable parts can be bought as spare parts from your RAIS distributor.
For reference see spare parts drawing (front of manual).

Pos.	Quantity	Part no.	Description
1	1	1511090	Glass door
2	1	1512200	Fire brick set
3	1	1015500	Seal set for glass door
4	1	61-00	Flue collar 6”
5	1	1510990	Air damper
6	1	251060180	Top plate w. convection (stainless steel)
	1	251060790	Top plate w. convection (black)
7	1	251061190	Top plate
8	1	1311890	Closing mechanism
9	1	61-105	Flue collar 5”
10	1	2511590	Swivel base

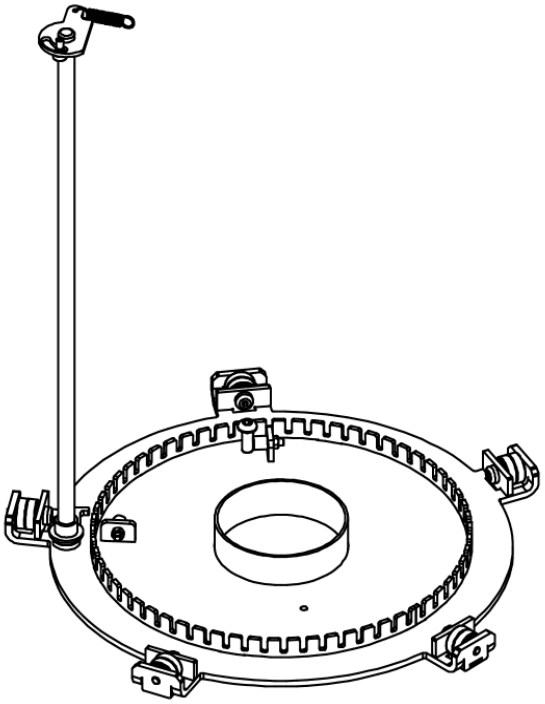
New PILAR / PILAR 13 L / PILAR 13 H

Reservedelstegning / Ersatzteilzeichnung / Spare parts drawing / Dessin des pièces de rechange / Reservdelsritning / Varosapiitokset / Tekeningen van reserveonderdelen

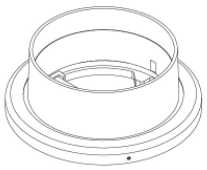


Accessories New PILAR / PILAR 13 L / PILAR 13 H

2511590 - Swivel base - complete



8142390 - Swivel base connection

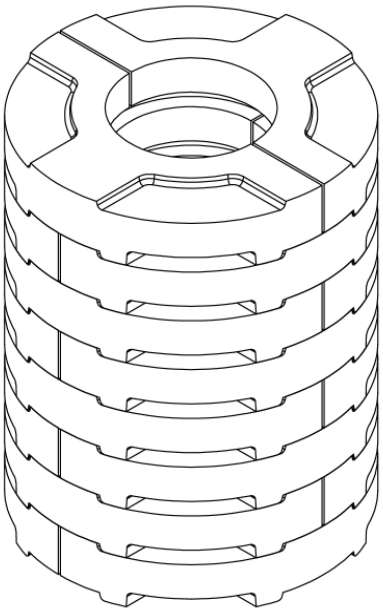


Air kit 24 (væg) 000651724xx (xx: optional color code)

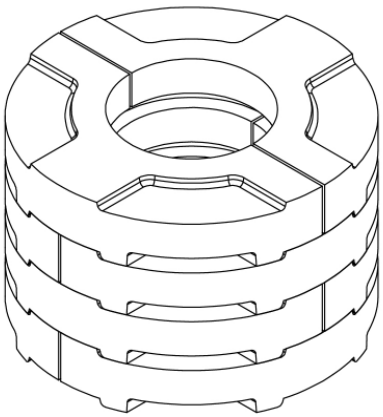
Air kit 25 (gulv) 00065172590

Heat accumulation stone

2517201 - 16x (96 Kg)



2527201 - 8x (48 Kg)



Problem solving

Smoke spillage around door:
- could be due to too low draught in the chimney <12Pa
- check if the flue or chimney is blocked
- check if a extraction hood is switched on; if it is, switch it off and open a window/door in the proximity of the stove for a short while.

Soot on glass:
- could be because the firewood is too wet.
- make sure that the stove is heated properly when firing up, prior to closing the door
- could be because the damper regulation is too low.

A stove burning too strong could be caused by:
- a leak around the door seal
- chimney draught too large >22 Pa, draught control regulator should be installed.

A stove burning too weakly could be caused by:
- too little firewood
- too little air supply for the room ventilation
- dirty smoke channels
- leaking chimney
- leakage between chimney and flue

If your stove continues to malfunction, we recommend that you contact your RAIS distributor or chimney sweep.

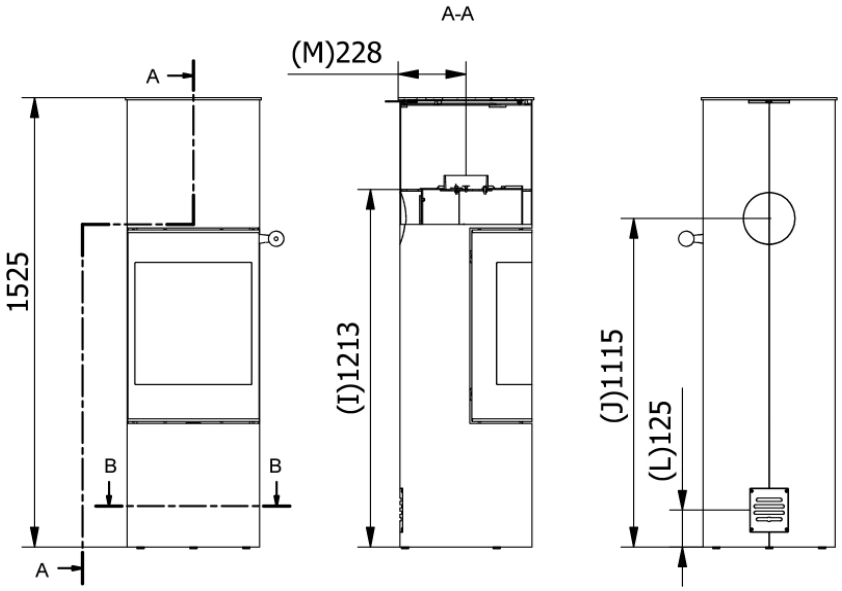
IMPORTANT!!

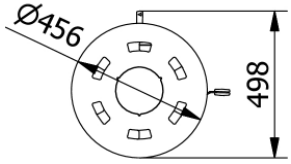
To ensure safe burning there must be clear yellow flames or clear embers at all times. The firewood should not be smouldering. Therefore you should never completely cut off the air supply.

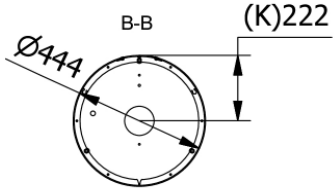
WARNING!!

In case of chimney fire:
- shut off all air supply on the wood burning stove
- contact the fire services
- never attempt to put out fire with water!
- afterwards, you should ask your chimney sweep to check the stove and chimney

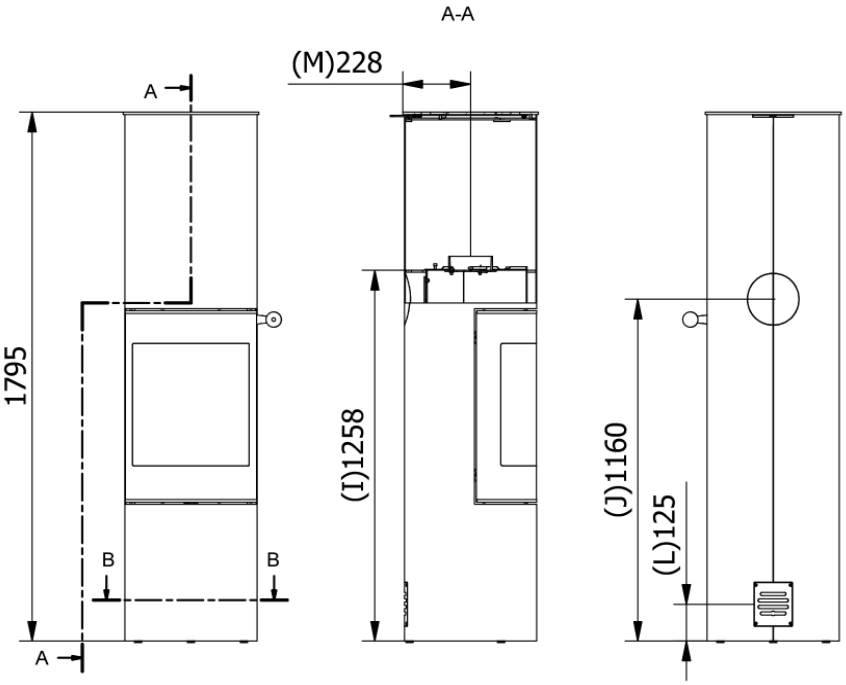
New PILAR / PILAR 13 L

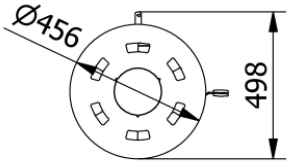


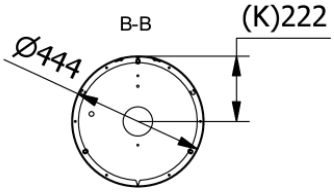




New PILAR / PILAR 13 H







RAIS ART OF FIRE

DECLARATION OF PERFORMANCE

Regulation (EU) 305/2011 No. 0001 — CPR-2013/07/01

No.: 151

1. **Unique identification code of the product-type** — RAIS PILAR 13 L, RAIS PILAR 13 H, ATTIKA PILAR 13 L, ATTIKA PILAR 13 H
2. **Type** — Room heater burning solid fuel without hot water supply
3. **Intended use** — Domestic room heater
4. **Manufacturer** — RAIS A/S, Industrivej 20, Vangen, DK-9900 Frederikshavn, Denmark
   Telephone +45 98 47 90 33
   Telefax +45 98 47 92 91
   Webmail kundeservice@rais.dk
   Homepage www.rais.com
5. **Authorised representative** — n/a
6. **System of assessment AVCP** — System 3
7. **Notified body** — The notified laboratory *Danish Technological Institute - Identification no. 1235, Teknologiparken, Kongsvang Allé 29, DK-8000 Århus C*

performed the determination of the product type on the basis of type testing under system 3 and issued test report

a. 300-ELAB-2006-EN

8. **Declared performance** — Harmonized technical specification: EN 13240:2001/A2:2004/AC:2007

Essential characteristics	Performance	
Fire safety		
Reaction to fire	A1	Uninsulated flue
Distance to combustible materials Minimum distances [mm] *For other installation settings see instruction manual*	Rear	50
	Sides	350
	Ceiling	-
	Front	850
	Floor	-
Risk of burning fuel falling out	Pass	
CO-emission of combustion products	0.0706 %	
Surface temperature	Pass	
Electrical safety	Pass	
Cleanability	Pass	
Maximum operating pressure	- bar	
Flue gas temperature T at nominal heat output	220 °C	
Mechanical resistance (to carry a chimney/flue)	NPD	
Thermal output		
Nominal heat output	4.8 kW	
Room heating output	4.8 kW	
Water heating output	- kW	
Energy efficiency η	83 %	

9. **The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.**

Signed for and on behalf of the manufacturer by: Henrik Nørgaard, Managing Director

Place FREDERIKSHAVN, DENMARK

Date 13/9-2013 13-09-2013

Signature

RAIS®
ART OF FIRE

RAIS A/S
Industrivej 20
DK-9900 Frederikshavn
www.rais.dk

Robeys

U K Distributor.

Robeys Ltd.
Riverside, Goods Road, Belper,
Derbyshire, England. DE56 1UU
Tel: 01773 820940 Fax: 01773 820477
E Mail: info@robeys.co.uk
www.robeys.co.uk

THE ORIGINAL

March 2014